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Busy Yet Socially Engaged: Volunteering, Work–Life Balance, and Health in the Working Population

Romualdo Ramos, MSc, Rebecca Brauchli, Dr., Georg Bauer, Dr. med., Theo Wehner, Prof. Dr., and Oliver Hämmig, Dr.

Objective: To understand the relationship between volunteering and health in the overlooked yet highly engaged working population, adopting a contextualizing balance approach. We hypothesize that volunteering may function as a psychosocial resource, contributing to work–life balance and, ultimately, health. **Methods:** A total of 746 Swiss workers participated in an online survey; 35% ($N = 264$) were additionally volunteers in a nonprofit organization. We assessed volunteering, work–life balance perceptions, paid job demands, and resources and health outcomes. **Results:** After controlling for job characteristics, volunteering was associated with less work–life conflict, burnout and stress, and better positive mental health. Results further revealed that balance perceptions partly explained the relationship between volunteering and health. **Conclusions:** Volunteering, albeit energy and time-consuming, may contribute to a greater sense of balance for people in the workforce, which might, in turn, positively influence health.

Voluntary work has been a quintessential element of civil society over the decades, with millions of people worldwide engaged in a broad variety of activities.¹ We define *voluntary work* as the sustained, unpaid work within an organization for the benefit of the environment or individuals other than, or in addition to, close relatives.² It requires time expenditure and it could theoretically be carried out by other people and could potentially be remunerated.³ This definition sets apart *formal* volunteering (our focus of interest) from *informal* volunteering, which tends to be more spontaneous and lacks the organizational infrastructure. In countries such as the United States and Switzerland, about a quarter of the population is engaged in some type of formal voluntary activity through an organization.^{4,5} The positive impact of volunteering at the societal level is widely accepted and virtually undisputed, as it promotes solidarity, social responsibility, and a sense of community while burdening the social welfare. In recent years, however, research has leaned more toward the individual level, concentrating on the experience of volunteers and the benefits they reap from their engagement. Indeed, volunteers often report experiencing positive emotions derived from their engagement.^{6,7} The voluntary activity provides individuals with continuous social interaction and elicits a sense of fulfillment, self-efficacy, and a rewarding feeling of giving something back to society.^{6,8} An ever-burgeoning literature further shows that such experiences can translate into positive health outcomes. Volunteering has been associated, among others, with better self-rated health,^{7–9} lower depression levels,^{10–12} lower mortality rates,^{13–15} lower frequency of hospitalization,¹⁶ and overall life satisfaction.^{7,9}

Arguably, most research on volunteering and health has primarily focused on senior citizens,¹⁷ turning age into the factor that

has led the way in most research programs. This becomes apparent in the ubiquity of articles in gerontological journals that address the topic (for reviews, see Casiday et al¹⁸ and Wilson¹⁹). One reason for this focus might be that older adults seem to benefit more than their younger counterparts.^{9,20} Given their withdrawal from the workforce, volunteering represents for many elderly adults a meaningful, enriching activity that boosts their self-esteem and reinvigorates the otherwise cut-down social relationships.^{6,21} Some authors argue that the difference may also lie in the fact that younger adults sometimes feel “obliged” to volunteer (eg, when related to other responsibilities such as parenting) or that they might be overall more extrinsically motivated (eg, in order to have a competitive advantage in the job market). Instead, older adults might be more intrinsically driven, wanting to fulfill a purposeful role in their community.²² Finally, the larger effects among older adults could also be explained by the fact that younger adults show less health variability, what might statistically hamper the effects.¹⁷

Yet the focus on the retired population has eclipsed the largest segment of the volunteering sector. In fact, 77% of volunteers in the United States are younger than 65 years, with the highest rate of engagement among those between 35 and 44 years of age.⁴ A similar age pattern is found in the Swiss volunteering landscape. Moreover, data from an extensive poll in Switzerland provide insights into the employment conditions of volunteers. Against all odds, people in the workforce are more likely to be volunteers than the unemployed (eg, laid-off personnel, students, housewives, senior citizens). Data also show that whereas women in part-time jobs are more likely to volunteer than women in full-time positions or the unemployed, the volunteering rate for men increases with their level of employment; that is, full-time male workers are more likely to volunteer.⁵ It follows that the study of volunteering as a mere postretirement activity and, consequently, in isolation from other life domains might obliterate relevant knowledge about its health implications in the larger population. To better understand the effects of volunteering for younger, gainfully employed adults, a more contextualizing approach is needed, where domains such as paid work, private life, and the balance between them are considered.

A BALANCE APPROACH TO VOLUNTEERING

As the job market reaches unfathomable levels of acceleration and societal values gravitate more toward deceleration and “time for the self” (particularly in highly industrialized countries²³), the idea of a sound, balanced lifestyle gains relevance both in research and in our daily living. The term “work–life balance” (hereafter WLB) has become lay language and the debate on the topic trickles through all spheres of society. As some authors put it: “People feel overworked, and with not enough time to be a good worker, nor a good parent, partner, child, and citizen.”^{24(back cover)} The inclusion of the role as a citizen in this context is particularly appropriate and raises the question as to why volunteering has not yet been studied within a WLB framework.

From the occupational health perspective, WLB has been linked to a myriad of health-related outcomes at the physical, mental, and social level (for a review, see Geurts and Demerouti²⁵ and Greenhaus and Allen.²⁶) Traditionally, WLB has been conceived

From the Department of Management, Technology and Economics, ETH Zurich (Mr Ramos and Dr Wehner), and Epidemiology, Biostatistics and Prevention Institute, University of Zurich (Mr Ramos, Dr Brauchli, and Dr Bauer), Zurich, Switzerland.

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Address correspondence to: Romualdo Ramos, MSc, Division Public and Organizational Health, University of Zurich, Winterthurerstrasse 30, CH-8006 Zurich, Switzerland (rramos@ethz.ch).

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from a *role strain* perspective,²⁷ which posits that participation in multiple roles leads to interrole conflict due to scarcity of time and energy resources. Hence, WLB has often been operationalized and understood as the absence of work–life conflict (WLC). In recent years, however, scholars have come to acknowledge the potential gains from multiple roles such that participation in one domain may have a positive impact on the performance in other domains, be it through transfer of knowledge and skills or simply due to a spillover of positive affect. The assumption that a transfer of resources takes place among life domains lies at the core of the *role enhancement hypothesis*,^{28,29} which has led to an understanding of WLB not only in terms of conflict but also in terms of work–life enrichment (WLE).³⁰

In the light of the work/nonwork interface, volunteering represents a peculiar type of life domain, which cannot be easily circumscribed to either work or leisure. It is activity characterized by freedom of choice, yet there is also a strong social commitment component, which sets it apart from other leisure activities such as hobbies. Personal interests might be at play, yet the self is not the fulcrum of the voluntary engagement, as it is per definition “work for the benefit of the environment or individuals other than, or in addition to, close relatives.”³² We assume, however, that the positive emotions elicited through volunteering might lead to a greater sense of balance, minimizing the perceived conflict and augmenting the perceived enrichment among domains. Our rationale lies on the premises of Marks’ *expansion approach*.³¹ He suggests that having multiple roles does not necessarily deplete our resources, because activity is also necessary to stabilize the production of human energy. In other words, we could speak here of a homeostatic cycle, where the expenditure of resources is simultaneously associated with the creation of new ones. Empirical research seems to substantiate this theorizing as it pertains to voluntary work. Volunteers are able to carry out their daily life activities with no major functional impairment^{7,10} and they show better family functioning than nonvolunteers.³² Recent experimental evidence helps to further understand the potential stabilizing effect of volunteering. Mogilner et al³³ showed, in a series of studies, that people who were asked to help others (eg, helping at-risk students with their homework or providing emotional support to the ill) experienced a greater sense of time affluence than those who spent their time doing nothing or doing something for themselves. Although *objectively* speaking participants in the experimental condition had incurred an expenditure of time resources, they *perceived* having more time available than those who did not help others. This counterintuitive way of palliating the widespread feeling of “never having time” was explained in a mediation model by the heightened levels of self-efficacy participants experienced when helping others. Self-efficacy is highly correlated with self-esteem, (less) neuroticism, locus of control, and sense of mastery, with authors arguing that they all represent a common core construct.³⁴ Thus, *objective* time resources were replenished by these psychosocial resources, which in turn positively biased the *subjective* perception of time availability. In a similar fashion, we expect that volunteering might contribute to a greater sense of WLB so that WLC is mitigated and WLE is amplified by the voluntary engagement.

JOB DEMANDS AND RESOURCES, WORK–LIFE BALANCE, AND HEALTH

Because we are targeting the health condition of volunteers who are also part of the workforce, an assessment of their working conditions becomes crucial. The Job Demands-Resources model³⁵ (JD-R) has been one of the leading frameworks in explaining the effects of job characteristics on employees’ health and well-being. Using a broader range of job characteristics than previous stress models, the authors outline a dual process in which job demands such as work overload, and emotional and cognitive demands, lead to strain (*impairment process*), whereas job resources such as social support, autonomy, and job significance

help achieve work goals, buffering demands, or stimulating personal growth, learning, and development (*motivational process*). The motivational process is also an important contribution of the JD-R model, which steers away from the one-sided focus on burnout and job strain and considers positive health outcomes, as advocated by salutogenic approaches.³⁶ Through the mechanisms of burnout and work engagement, the JD-R model has proven its predictive value for a plethora of work and health-related outcomes (for a review, see Van den Broeck et al³⁷).

There are only few studies that have attempted to integrate WLB perceptions in the JD-R model. We argue that such perceptions should be paramount in explaining the ensuing health outcomes; that is, the extent to which job demands and resources are health-impairing or health-enhancing will depend on the extent to which individuals perceive them as conflicting with, or enriching for other life domains. Some studies have indeed shown that job demands and resources predict work–home interference.^{38,39} There is also preliminary evidence that work-to-life conflict might partially mediate the relationship between job-related psychological demands and emotional exhaustion.⁴⁰ It is worth noting, however, that these studies have only considered the conflict, but not the enrichment among domains. In this study, we also consider the positive enrichment axis.

The interplay between paid work and volunteering has rarely been studied. Research by Mojza and colleagues⁴¹ constitutes the exception. By means of diary studies, the authors showed that the amount of time spent on voluntary work activities in the evening was positively correlated with psychological detachment from work and this, in turn, was correlated with active listening at work the following day. The extent of volunteering was also negatively correlated with negative affect the following day, which was explained through heightened need satisfaction.⁴¹ In another sample, the authors found that voluntary work the night before buffered the effect of job stressors on affect and active listening the following day.⁴² These studies provide a robust picture of the day-to-day effects of volunteering. Nevertheless, they are limiting in that they do not include control groups of nonvolunteers, which might derive psychological detachment through other activities. In addition, they narrowed the scope of outcome variables to psychological detachment, affect, and active listening, with the latter being more related to performance rather than well-being. In another study based on survey data,⁴³ it has been shown that volunteering was associated with both volunteer and paid job meaningfulness, and that the extent of meaningful volunteer work was stronger when participants reported less meaningful jobs. Her results further revealed that volunteering was related to job absorption at the paid work, but not with job interference (eg, “The demands of volunteering interfere with work-related activities”), which in turn was associated with better job performance. This finding is preliminary evidence of a potential positive spillover of volunteering into the work domain.

PRESENT STUDY

The aim of this study is to shed light on the potential health-promoting effects of volunteering in the somewhat overlooked yet highly engaged working population. To that end, we assessed and controlled for participants’ paid work conditions (ie, job demands and resources), which help understand the weight of volunteering on health above and beyond the dominant work domain. On the basis of the previous evidence, we first hypothesize that the extent of volunteering will be associated with higher levels of well-being and health. Specifically, we expect it to be negatively associated with burnout and stress and positively correlated with positive mental health and work engagement. Second, we hypothesize that volunteering may function as a psychosocial resource, minimizing perceptions of WLC and enhancing perceptions of WLE. Finally, we test a mediation model in which the relationship between volunteering and health-related

outcomes is explained by perceptions of WLC and WLE. The proposed model is depicted in Fig. 1.

METHODS

Procedure and Participants

We conducted an online survey on “work and leisure” and participants were recruited through a panel data service with more than 20,000 panelists in Switzerland. We first screened panelists on the basis of age and workload. Inclusion criteria were being older than 18 years and being employed at least 20 hours a week. The language also constituted an inclusion criterion because the survey was only in German (hence, it was sent only to residents in the German part of Switzerland). After this initial screening, a random group of 4325 panelists was contacted to participate. A total of 774 panelists completed our survey, yielding a response rate of 18%. We carefully observed the data from “speeders” (ie, participants with very short duration time) and set a cutoff limit of 400 seconds, under which participants were excluded. Twenty-eight respondents were removed from the data set based on this criterion, leaving a final sample size of 746 participants. From the 746 participants, 35% ($N = 264$) were additionally engaged in some type of formal volunteering. Sport clubs, charitable organizations, and cultural associations were the fields in which volunteers were the most active.

Measures

The questionnaire assessed perceptions of WLC and WLE, followed by demands and resources from their paid work, and concluded with the report of various health-related outcomes and demographics. Volunteers also provided details about their voluntary work.

Voluntary Work

We first defined voluntary work (in accordance with our focus on formal volunteering) and then asked participants whether they participated in such activities within a nonprofit organization (yes/no). We then assessed both the frequency and the intensity of the voluntary service. Nonvolunteers were automatically assigned a value of 0. We coded frequency by estimating the number of days within a month in which participants are engaged in voluntary activities (0.3 = *rarely/two to five times a year*; 2 = *one to three times a month*; 4 = *once a week*; 10 = *several times a week*). Intensity was operationalized as the average number of hours worked within a given volunteering day. Finally, we multiplied both frequency and intensity, creating a compound variable. This dual assessment of the extent of volunteering aimed at simplifying the reporting process for participants, avoiding effortful calculations, and presumably yielding

a more accurate picture. Because nonvolunteers ($N = 482$) outweighed volunteers ($N = 246$), we corrected for positive skewness applying logarithmic transformation on the compound variable.⁴⁴

Work–Life Conflict and Work–Life Enrichment

We used the 22-item Survey of Work-home Interaction Nijmegen (SWING) as our WLB measure.⁴⁵ The authors use the term “home” in a broad sense, meaning private life in various social circles (eg, “How often does it happen that you have to cancel appointments with your partner/family/friends due to work-related commitments?”). Unlike other scales, which have primarily focused on time-based and strain-based conflict, Geurts and colleagues⁴⁵ have also contemplated enrichment between work and home (eg, “How often does it happen that you fulfill your domestic obligations better because of the things you have learned on your job?”). Furthermore, conflict and enrichment are assessed bidirectionally, that is, from work to home (as in the previous examples) and from home to work (“How often does it happen that you do not feel like working because of problems with your spouse/family/friends?”). All items were rated on a four-point Likert scale from “never” to “always.”

Job Characteristics

This question block aimed at depicting the distribution of demands and resources in participants’ paid work. We used subdimensions from both the Work Design Questionnaire (WDQ)⁴⁶ and the Second Copenhagen Psychosocial Questionnaire (COPSOQ II).⁴⁷ Job characteristics were chosen on the basis of their relevance at the interface between paid job and volunteering. Three subdimensions assessed job demands: *quantitative demands* (eg, “Do you have enough time for your work tasks?”), *emotional demands* (eg, “Do you get emotionally involved in your work?”), and *cognitive demands* (eg, “Do you have to keep your eyes on lots of things while you work?”). The resource component comprised *autonomy* (eg, “The job allows me to make a lot of decisions on my own”), *social support* (eg, “I have the opportunity to develop close friendships in my job”), and *job significance* (eg, “Do you feel that the work you do is important?”). All items were rated on a five-point Likert scale with varying labels depending on the scale of origin.

Health Outcomes

We administered a broad spectrum of health-related measures, capturing both general and work-related health, on physical, mental, and social dimensions. In congruence with the salutogenic approach,³⁶ we opted for measures that would reflect not only ill health (eg, burnout and stress) but also well-being (eg, positive mental health and work engagement), known to be important sources of resilience.

Burnout (COPSOQ II).⁴⁷ We chose this parsimonious four-item scale to measure the frequency of episodes of physical and emotional exhaustion (eg, “How often have you felt worn out?”). Participants answered on a five-point Likert scale ranging from “never/almost never” to “always.”

Stress and related symptoms (COPSOQ II).⁴⁷ We measured overall stress (eg, “How often have you had problems relaxing?”) and its related cognitive and somatic symptoms. Examples of the latter are “How often have you had problems concentrating?” and “How often have you had palpitations?” The scale comprised 12 items rated on a five-point Likert scale ranging from “never” to “always.”

Positive mental health (Mental Health Continuum short form).⁴⁸ This 14-item scale captures psychological, emotional, and social well-being. Participants are asked to rate on a six-point Likert scale the frequency of positive feelings and emotions within the last month. Such feelings are derived from an overall appraisal of one’s social functioning, emotional stability, and life satisfaction. Some examples are “During the past month, how often did you feel satisfied with life?”, “(…) that you had something important to contribute to

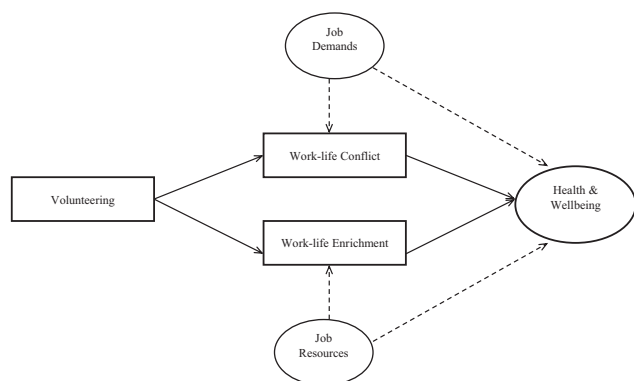


FIGURE 1. Hypothesized model. Solid lines represent the hypothesized paths; dotted lines represent the effect of established control variables.

society?” or “(. . .) that you had warm and trusting relationships with others?” Participants answered on a six-point Likert scale ranging from “never” to “every day.”

*Work engagement (Utrecht Work Engagement Scale).*⁴⁹ Work engagement is “the positive work-related state of fulfillment that is characterized by vigor, dedication and absorption”⁴⁹ and is believed to be the antipode of burnout. All these three aspects are subsumed in a nine-item scale. Examples are “I am enthusiastic about my job” and “I feel happy when I am working intensely.” Participants rated the frequency of these events on a seven-point Likert scale ranging from “never” to “always.”

Data Analysis

We first ran a correlation analysis with all study variables. We then conducted six hierarchical regression analyses (one for each of the dependent variables) with four steps. Following conventions,⁴⁴ we first included known variables in our model (ie, demographics, job demands, and resources) and our predictor of interest, namely volunteering, was included in the last step of the regression analysis. We favored hierarchical regressions over structural equation modeling for two reasons: first, we were interested in knowing the association of volunteering with health outcomes *above and beyond* determinants in the work domain. Second, and as a result of the latter, our model included a large number of parameters, what would have required a much larger sample to yield stable estimates.⁵⁰ Finally, we tested the suggested mediation between volunteering, WLB perceptions, and health outcomes using Preacher and Hayes’ *Process* macro,⁵¹ controlling for age, sex, job demands, and resources. We used bootstrapping with 1000 replicates for the analysis.

Given that our data are entirely based on self-report at a single point in time, concerns that the effects might be driven by common method variance are likely to arise. To assess whether this bias was at work, we recurred to statistical procedures that have been widespread

used in social research.⁵² We first ran an exploratory factor analysis (EFA) with the study variables. Based on *Harman’s single-factor test*, if common method variance was an issue, most items would load on the first unrotated factor. Instead, our data showed a clear multifactorial structure with most variables loading on single factors. To control for method effects statistically, we additionally partialled out a general method factor.^{53,54} We calculated factor scores for each participant by choosing Bartlett’s approach during the EFA process. We took the first unrotated factor score, which is the factor explaining the most common variance,⁵⁵ and included it as the first step in our regression models to see whether it had any impact on subsequent steps. In sum, we found that the first common factor accounted for 8.9% of the variance in our model. As expected, the effect sizes of some of our variables were reduced; however, the direction of the relationships remained unchanged and they were all still significant (provided they were significant in the uncontrolled model). It is important to highlight that a major caveat of this procedure is its inability to differentiate between variance attributable to common method and variance attributable to the predictors.⁵² It is thus a very conservative estimate, which might obfuscate genuine, true variance. For this reason, we have not included the general factor in our result analyses (the EFA and the regression models with control of the first common factor are available upon request to the first author). These analyses give us the confidence to state that common method variance was not a pervasive problem in our data.

RESULTS

Descriptive Statistics and Correlation Analysis

Table 1 presents descriptive statistics on relevant demographic variables as well as the frequency and intensity of volunteering. The mean age for the entire sample was 42 and there was no major difference between volunteers and nonvolunteers. The sex

TABLE 1. Descriptive Statistics

Variables	Volunteers (n = 264)	Nonvolunteers (n = 482)	Total (N = 746)
Mean age (SD)	42.84 (11.64)	41.65 (11.67)	42.07 (11.67)
Sex			
Male	161 (61%)	227 (47.1%)	388 (52%)
Female	103 (39%)	255 (52.9%)	358 (48%)
Workload			
20–31 hr a week	42 (16%)	78 (16.2%)	120 (16.1%)
32–39 hr a week	37 (14%)	90 (18.7%)	127 (17%)
40+ hr a week	185 (70%)	314 (65.1%)	499 (66.9%)
Education			
High school	4 (1.5%)	10 (2.1%)	14 (1.9%)
College/vocational school	129 (48.9%)	296 (61.5%)	425 (56.9%)
Applied higher education (bachelors/masters)	87 (33%)	127 (26.3%)	214 (28.8%)
University (masters/PhD)	44 (16.7%)	49 (10.2%)	93 (12.5%)
Children in the household			
None	177 (67%)	340 (70.5%)	517 (69.3%)
1–2 children	74 (28%)	117 (24.3%)	191 (25.6%)
3+ children	13 (5%)	25 (5.2%)	38 (5.1%)
Hours per week spent in housework (SD)	6.89 (5.37)	6.70 (5.52)	6.77 (5.47)
Frequency of volunteering			
Rarely/two to five times a year	60 (22.7%)	...	...
One to three times a month	84 (31.8%)	...	...
Once a week	59 (22.3%)	...	...
Several times a week	61 (23.1%)	...	...
Hours spent in an average volunteering day (SD)	4.45 (1.88)	...	...

distribution across the sample was quite balanced, with 48% females. Nevertheless, we found a slight disproportion in engagement, where men (61%) volunteered more than women (39%). Sixty-seven percent of the sample turned out to be employed full-time (40 hours or more). The workload was comparable for both groups, although volunteers were full-time workers at a slightly higher rate. Percentages also show that volunteers had higher educational levels than nonvolunteers. In terms of private demands, almost 70% of the sample had no children living in the household, and the distribution was quite similar between the two groups. Moreover, both groups reported spending almost the same amount of time per week in household chores (the mean was positively skewed, as suggested by the large standard deviation, yet both groups were similar even when frequencies were observed). These two measures ensured that both groups were comparable with respect to private demands. Finally, the frequency of volunteering was evenly distributed and volunteers spent in average 4.45 hours in a volunteering day. All in all, the sample—and in particular the subsample of volunteers—was quite representative, as it mirrored the distribution in the larger population in regard to age, workload, sex, and education levels, which have been reported by extensive national-level surveys in Switzerland.⁵

Results for the correlation analyses are shown in Table 2. Variables correlated in the expected direction, except for emotional and cognitive demands, which yielded mixed results (we will consider this issue in the “Discussion” section). The scales yielded good internal consistency as shown by the reliability tests (Cronbach α between 0.69 and 0.96). Interestingly, the extent of voluntary work correlated significantly with demands but not with resources at the workplace. Finally, voluntary work correlated positively with WHE, positive mental health and work engagement, and negatively with WHC, stress, and burnout.

Hierarchical Regression Analyses

The results of the hierarchical regression analyses are shown in Table 3. The first step in the model—age and sex—reveals that, as participants' age increases, they report less conflict ($\beta = -0.20$) and more enrichment ($\beta = 0.15$) and they score better in all health-related outcomes and work engagement (β s between 0.09 and 0.18). Women reported slightly higher levels of burnout ($\beta = 0.12$) and stress ($\beta = 0.15$) than men, but no differences were found in WLB perceptions. The two subsequent steps, job demands and job resources, explained most of the variance in our model. In accordance with the extensive findings of the JD-R model,³⁵ demands were more strongly associated with stress, burnout, and WLC—that is, factors along the strain (negative) axis—whereas resources correlated more with WLE, positive mental health, and work engagement—that is, factors along the motivational (positive) axis. Finally, our main predictor, namely the extent of voluntary work, was associated with lower levels of WLC ($\beta = -0.10$), burnout ($\beta = -0.10$), and stress ($\beta = -0.07$) and higher levels of positive mental health ($\beta = 0.14$). No significant effects were found for WLE and paid work engagement.

Mediation Analysis

The results of the mediation analysis are displayed in Table 4. Because no relationship was found between volunteering and WLE, we concentrated only on the mediation of WLC. Likewise, we dropped work engagement from our analyses. As expected, WLC correlated positively with burnout ($B = 1.02$) and stress ($B = 0.799$) and negatively with positive mental health ($B = -0.569$). R^2 values show that between 8% and 14% of additional variance in health outcomes was explained when WLC was included in the model (R^2 values of the models without WLC were extracted from Table 3). When comparing the direct paths between volunteering and health outcomes (c paths) with the indirect paths after controlling for WLC (c' paths), data show a full mediation effect for stress and related symptoms, and partial mediations for burnout and positive mental

TABLE 2. Correlation Table for Study Variables^a

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Voluntary work	...														
2. Age	0.06	...													
3. Sex	-0.16**	-0.17**	...												
4. Quantitative demands	-0.12**	-0.03	-0.06	(0.85)											
5. Emotional demands	0.08*	0.11**	0.04	0.22**	(0.84)										
6. Cognitive demands	0.13**	0.15**	-0.08*	0.22**	0.44**	(0.75)									
7. Job significance	0.03	0.12**	-0.07	-0.14**	0.25**	0.31**	(0.94)								
8. Social support	0.02	0.11**	0.06	-0.16**	0.19**	0.22**	0.42**	(0.80)							
9. Autonomy	0.04	0.10**	-0.10**	-0.01	0.22**	0.45**	0.47**	0.37**	(0.83)						
10. WHC	-0.11**	-0.20**	0.07*	0.40**	0.20**	0.04	-0.27**	-0.20**	-0.17**	(0.78)					
11. WHE	0.07*	0.17**	0.01	-0.09	0.13**	0.20**	0.27**	0.21**	0.17**	-0.07	(0.69)				
12. Burnout	-0.11**	-0.20**	0.17**	0.33**	0.15**	0.01	-0.29**	-0.20**	-0.16**	0.58**	-0.14**	(0.90)			
13. Stress & symptoms	-0.08*	-0.20**	0.20**	0.36**	0.21**	0.03	-0.28**	-0.19**	-0.19**	0.62**	-0.13**	0.77**	(0.90)		
14. Positive mental health	0.16**	0.12**	-0.03	-0.17**	0.09**	0.23**	0.46**	0.41**	0.28**	-0.41**	0.34**	-0.47**	-0.49**	(0.91)	
15. Work Engagement	0.06	0.17**	-0.05	-0.14**	0.18**	0.29**	0.68**	0.42**	0.44**	-0.34**	0.36**	-0.40**	-0.39**	0.58**	(0.96)

* $P < 0.05$; ** $P < 0.01$.

^a $N = 746$. Cronbach α values are displayed along the diagonal in parentheses.

TABLE 3. Stepwise Hierarchical Regression Analyses for the Relationship Between Volunteering, WLB, and Health Outcomes Controlling for Job Demands and Resources, Age, and Sex^a

Steps and Predictor Variables	WLC		WLE		Burnout		Stress and Symptoms		Positive Mental Health		Work Engagement	
	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2
Step 1: Demographics		0.04**		0.03**		0.06**		0.07**		0.01**		0.03**
Age	–0.20**		0.15**		–0.18**		–0.18**		0.09**		0.11**	
Sex	0.02		0.05		0.12**		0.15**		0.02		0.02	
Step 2: Job demands		0.18**		0.05**		0.12**		0.16**		0.10**		0.12**
Quantitative Demands	0.31**		–0.08*		0.24**		0.26**		–0.11**		–0.05	
Emotional Demands	0.23**		0.01		0.19**		0.25**		–0.07*		–0.03	
Cognitive Demands	0.03		0.12**		0.03		0.03		0.10**		0.05	
Step 3: Job resources		0.07**		0.04**		0.07**		0.08**		0.18**		0.36**
Job significance	–0.18**		0.16**		–0.21**		–0.19**		0.31**		0.54**	
Social support	–0.12**		0.12**		–0.13**		–0.12**		0.26**		0.15**	
Autonomy	–0.08*		–0.02		–0.03		0.09*		0.01		0.10**	
Step 4: Volunteering		0.01**		0.00		0.01**		0.01*		0.02**		0.00
Voluntary work	–0.10**		0.05		–0.10**		–0.07*		0.14**		0.04	
Total R^2		0.30		0.12		0.26		0.32		0.31		0.51

* $P < 0.05$; ** $P < 0.01$.^aStandardized weights are shown. $N = 746$.

health. This becomes apparent through the weaker estimate values along the indirect path (c').

DISCUSSION

This study has attempted to steer clear of the dominant gerontological approach to volunteering and health and has focused on the largest segment of the volunteering sector, namely people in the workforce. We contextualized volunteering by considering the broader network of life domains and assessing the purported impact of volunteering above and beyond working conditions. We also introduced the WLB dimension as a “perceptual proxy” to health outcomes. On the basis of theorizing on role enhancement,^{28,29} the expansion approach,³¹ and empirical evidence on the stabilizing effects of volunteering⁴² and helping behavior,³³ we proposed that volunteering might be associated with a greater sense of life balance, which ultimately translates into better health. This study yields preliminary evidence for these hypotheses.

A hierarchical regression analysis showed that volunteering was associated with lower levels of burnout and stress and higher levels of psychological, emotional, and social well-being as measured by the scale of positive mental health.⁴⁸ This is in accordance with evidence from previous studies on stress and well-being in the voluntary sector.^{7,9} We did not find, however, support for a spillover effect onto the work domain, as volunteering did not correlate with paid work engagement. Work engagement is considered the “antipode of burnout,”⁴⁹ yet it is more domain-specific than the latter. Whereas burnout can result from the amalgamation of various factors, including those outside the realm of work,⁵⁶ work engagement seems strictly confined to the specific working conditions. This explains why job resources accounted for 35% of the variance in work engagement, yielding the largest R -squared change in our model. All in all, we could not replicate previous findings linking volunteering with job absorption, a subdimension of work engagement.⁴³ This might also be accounted for by the different operationalizations of volunteering (we will return to this point in the strengths and limitations part).

Volunteering had also a modest yet statistically significant effect on WLC. The latter decreased as a function of increasing voluntary engagement. Despite the fact that volunteering requires allocation of energy and time resources, people involved in such activities report less conflict among life domains. This finding is in line with previous experimental research on helping behavior and time affluence perceptions.³³ Nevertheless, volunteering was not associated with WLE. We have a suggestion as to why this might be the case. Greenhaus and Powell define *enrichment* as the “extent to which experiences in one role improve performance or the quality of life in the other role.”^{30(p.72)} Contrary to WLC, which denotes an energy and time scarcity due to conflicting life domains (“How often does it happen that you do not have the energy to engage in leisure activities with your spouse/family/friends because of your job?”), WLE might tap more into specific *qualitative spillovers* from one domain onto the other (“How often does it happen that you fulfill your domestic obligations better because of the things you have learned on your job?”). Hence, the idea that volunteering could have an impact on the qualitative spillover between two unrelated domains may come across as ambitious. In this particular case, the use of domain-specific scales (eg, work-volunteering enrichment) might be more appropriate. Nevertheless, these conceptualization issues draw once again attention on the difficulties of measurement in the work–family and work–life research,⁵⁷ particularly when it comes to the “positive side” and its related terms of spillover, enrichment, and facilitation. Previous studies have also consistently found stronger correlations for conflict than for enrichment,⁵⁸ and in more general terms, a heavier weight of negative over positive events in psychological phenomena.⁵⁹

TABLE 4. Mediation Analyses for the Effect of Volunteering on Health Outcomes Through Work–Life Conflict*

Model	B	SE	t	P	LB 99% CI	UB 99% CI	R ²
Volunteering → WLC (a)	−0.013	0.004	−3.58	0.000			
Burnout							
WLC → Burnout (b)	1.02	0.082	12.47	0.000			
Volunteering → Burnout (c)	−0.033	0.009	−3.67	0.000			0.26
Volunteering → Burnout (c')	−0.019	0.008	−2.26	0.024	−0.024	−0.004	0.39
Stress and symptoms							
WLC → Stress and symptoms (b)	0.799	0.055	14.49	0.000			
Volunteering → Stress and symptoms (c)	−0.013	0.006	−2.15	0.032			0.32
Volunteering → Stress and symptoms (c')	−0.002	0.005	−0.41	0.684	−0.019	−0.004	0.46
Positive mental health							
WLC → Positive mental Health (b)	−0.569	0.068	−8.28	0.000			
Volunteering → Positive mental health (c)	0.036	0.007	4.91	0.000			0.31
Volunteering → Positive mental health (c')	0.026	0.007	3.72	0.000	0.003	0.016	0.39

*Unstandardized regression estimates are shown. Job demands and resources, age, and sex were controlled for in all analyses. (a) Effect of the independent variable on the mediator; (b) effect of the mediator on the dependent variable; (c) direct effect of the independent variable on the dependent variable; (c') direct effect of the independent variable on the dependent variable controlling for the mediator. Indirect effects (not shown) can be calculated by subtracting the estimates of c' from c.

CI, confidence interval; LB, lower bound; UB, upper bound; WLC, work–life conflict.

As one of the main contributions of this study, we found that WLC mediates the relationship between volunteering and health outcomes. Through the experience of balance, herein understood as low conflict among life domains, volunteering was associated with less stress and burnout. The mediating effect was less pronounced (and practically inexistent) for positive mental health, which is yet another evidence of a dual process with two separate axes: a positive, *motivational* path and a negative, *health-impairing* axis.³⁵

The role of demographic variables and job demands and resources merits some attention. As expected, these variables explained most of the variance in health outcomes. Following the logic of the JD-R model, demands were stronger predictors of WLC, burnout, and stress, whereas resources were more associated with WLE, positive mental health, and work engagement. As mentioned before, emotional and cognitive demands showed some inconsistent patterns, sometimes correlating in the unexpected direction. Nevertheless, this goes well in line with the call for differentiation between hindering and challenging job demands.⁶⁰ Along the demographic variables, age was positively correlated with WLB, health, and work engagement. This finding is consistent with previous studies showing weak yet significant positive correlations between work engagement and age⁴³ and the results of a meta-analysis that found a negative correlation between age and burnout.⁶¹ Finally, there were no differences in WLB between sexes, consistent with previous findings,^{28,62,63} although women did report slightly higher levels of stress and burnout than men.

Strengths, Limitations, and Future Research

This study is one of the few attempts in the literature to contextualize volunteering and health within a broader life domain framework. We did so by gauging perceptions of WLB as well as paid job demands and resources. There are some strengths and limitations to this study, which should be borne in mind for future research.

The first and biggest limitation of this study is its cross-sectional nature, which does not allow us to establish causality. It could well be argued that people who volunteer are healthier in the first place (argument that has found some evidence in previous studies²⁰) or that a sense of work–life balance allows them to engage more in volunteering. This cannot be proven with our cur-

rent data. This is particularly problematic in the case of mediation hypotheses, because the chronological order of effects cannot be elucidated. Nevertheless, as Hayes argues, cross-sectional data should not be a deterrent from mediation analyses, in our attempt to “understand what our data might be telling us about the process we are studying.”^{51(p17)} Causal inferences are not the results of the statistical procedures we employ but a creation of our mind, based on theory and previous observations. We have provided a thorough theoretical and empirical background, which make the causal inference plausible. Having said that, longitudinal studies would be the next step in this research line, to grasp the life-course variation of different life domains (including volunteering) and their impact on WLB, health, and well-being.

Second, the results on this study should be taken with caution, because, as our hierarchical regression analyses show, the effect size of volunteering on health is indeed small, accounting for 1% to 2% of the variance in outcome variables. This could be related to the selection process mentioned previously (ie, that volunteers are healthier to begin with) and, more in general, to the bias of a healthy worker effect.⁶⁴ This phenomenon lies on the assumption that people in the workforce are usually healthier than the general population, as the severely ill and chronically disabled eventually withdraw from employment.⁶⁵ It could also be related to the operationalization of volunteering. Although we optimized and simplified the report of time spent on volunteering, concerns have been raised as to whether time-based measures are able to truly capture the intensity of the voluntary engagement.⁴³ Future research should find a common ground on how to best assess the intensity of voluntary work.

Third, throughout the study we advanced the idea of WLB as a “perceptual proxy” to more “observable” health outcomes. Work–life balance is indeed a subjective, perceptual dimension, which might be appraised differently by two individuals in similar situations. Nevertheless, the assessment of health in this study was not any less subjective. Although we controlled for and found no major effect of common method variance, the study of this constellation (ie, volunteering, WLB, and health) would be substantially improved with more objective measures of health. Moreover, although we gauged somatic symptoms of stress, this does not suffice to make inferences at the physical level. Future studies should pay greater

attention to physical parameters of health, which would imply a giant step within this research field.

Finally, we aspired to contextualize volunteering among other life domains, yet our focus has been primarily occupational. Although we assessed private demands with single items (ie, the number of children in the household, hours per week spent in housework) and found no difference between volunteers and nonvolunteers, a much more encompassing assessment of private obligations would be desirable. The home domain has been previously studied from a JD-R perspective.⁶⁶ Future studies considering nonwork domains such as volunteering should integrate the private sphere in their research program. In more general terms, the study of life balance should be enlarged in a way such that domains are considered in their own right, desisting from the dichotomization of work versus nonwork activities. In this regard, some scholars have coined the term “life domain balance” as a more encompassing construct.⁶⁷ Life domain balance as a concept does better justice in acknowledging the diversity of domains (eg, paid work, housework, child care, relationship, friends, hobbies, sports, voluntary work). New research should strive for this broader approach and aim new forms of operationalization.

CONCLUSIONS

Bearing in mind its limitations, this study has advanced a new perspective on volunteering, observing its role within the larger network of life domains and signaling a shift away from the dominant gerontological perspective on volunteering and health. It is possible that volunteering might contribute to a greater sense of life balance among those still active in the workforce, which in turn leads to lower levels of burnout and stress and higher levels of psychological, emotional, and social well-being. Further research is needed that might undergird such causal statements. Research programs that aim for a deeper understanding of the interplay among life domains would be able to better inform practitioners (in both private and nonprofit sectors) regarding work design and opportunities for their employees that might lead to a spiral of balance and well-being.

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